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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,474	12/28/2000	William J. Harrison	ACS-55966 (26991)	6584

24201 7590 05/04/2004

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EXAMINER

BUI, VY Q

ART UNIT	PAPER NUMBER
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3731

25

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/750,474

Applicant(s)

HARRISON, WILLIAM J.

Examiner

Vy Q. Bui

Art Unit

3731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,6-11 and 13-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6-11, 13-33, 35 is/are rejected.
- 7) ☒ Claim(s) 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

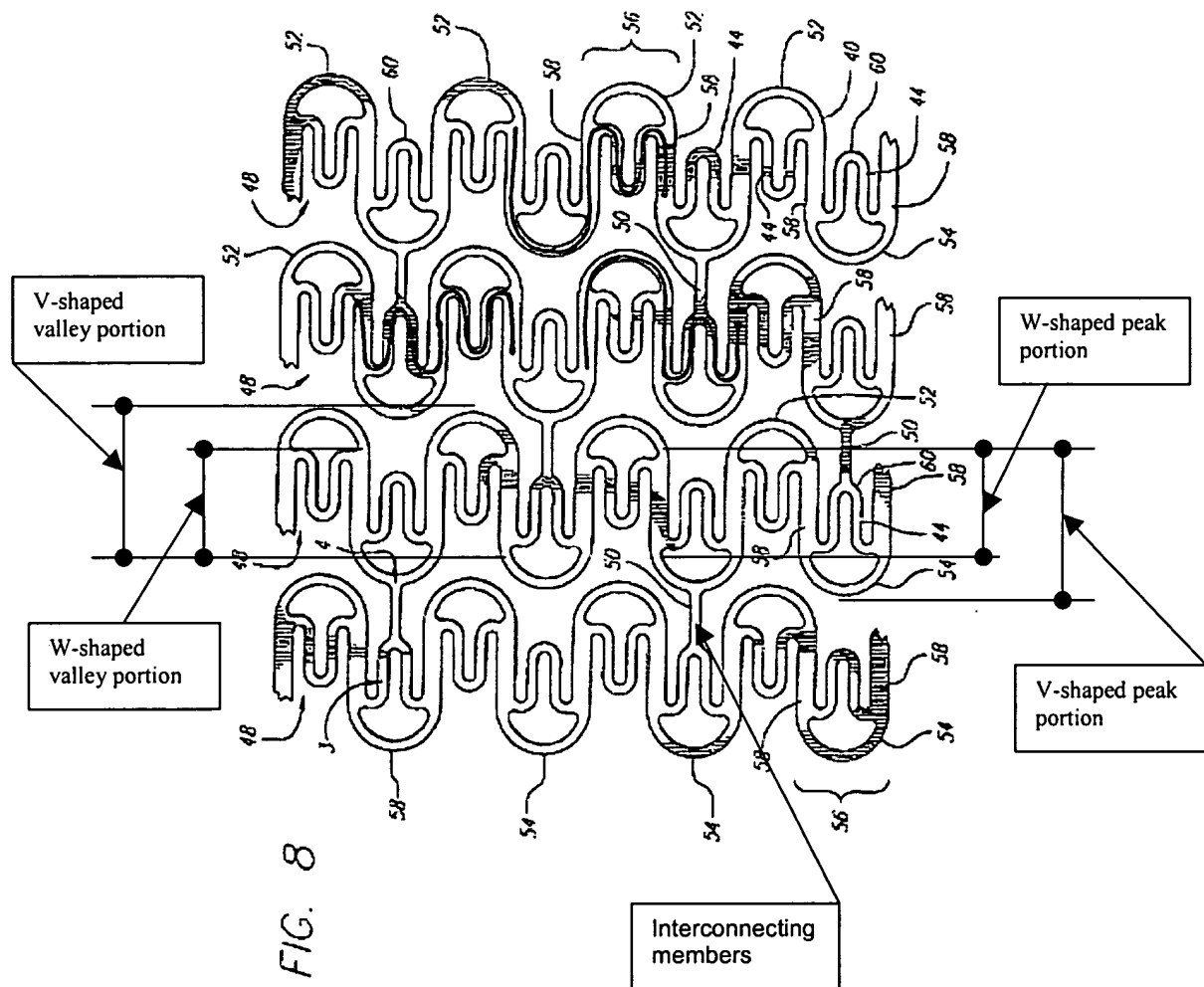
**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

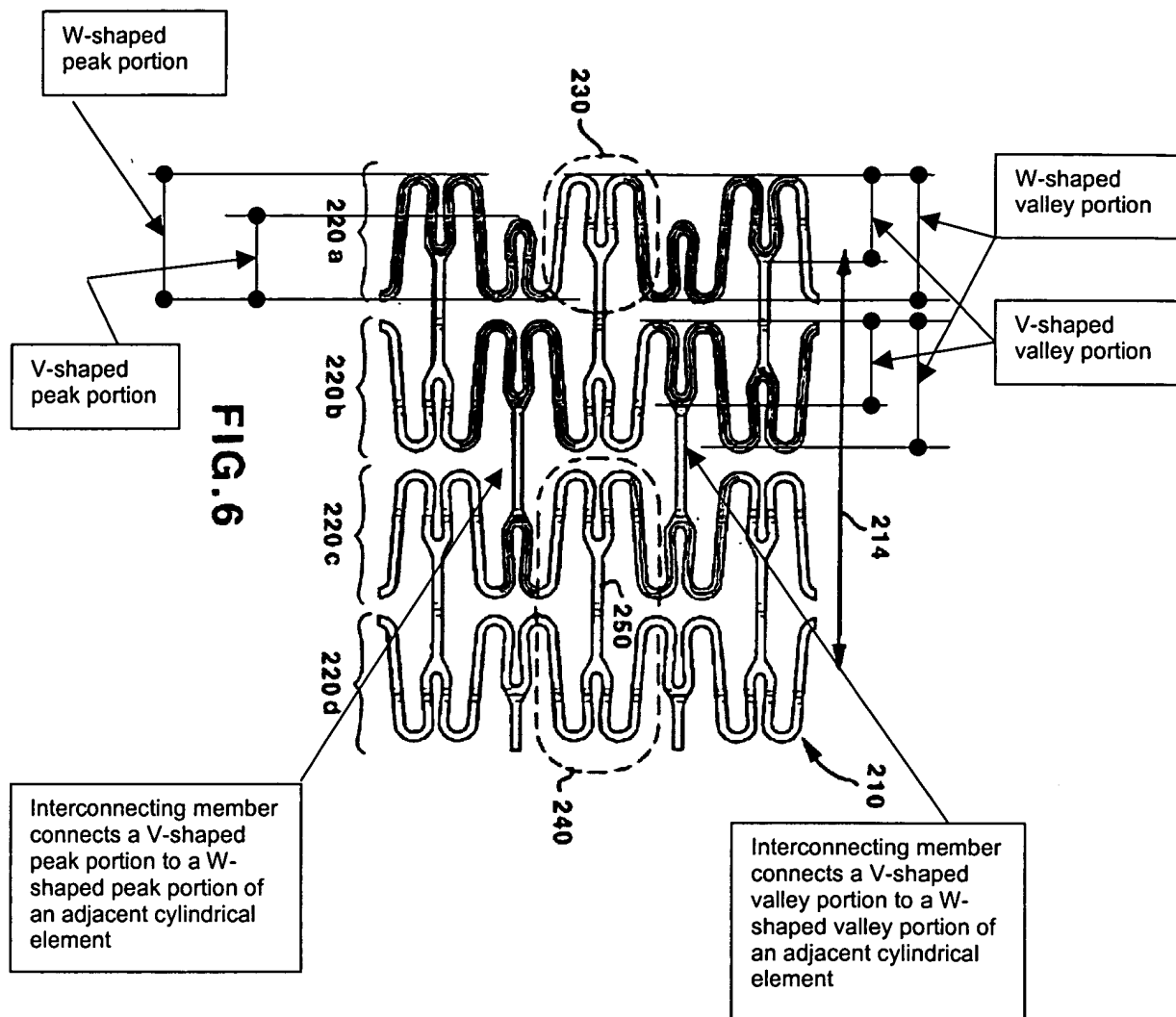
- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

DETAILED ACTION



ALLEN's Fig. 8

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DANG's Fig. 6

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 6, 8-9, 11, 17-18, 21-23, 24-31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by DANG et al (5,935,162).

As to claims 1, 3, 6, 8-9, 11, 17-18, 21-23 and 24-31, DANG (see Fig. 6 reproduced and shown in page 3) discloses a balloon assisted expanding stent or a self-expanding stent (col. 8, lines 31-35) comprising cylindrical elements of W-shaped valley and W-shaped peak/inverted W-shaped portions (in red color), V-shaped valley and V-shaped peak/inverted V-shaped portions (in green color), wherein W-shaped portions and V-shaped portions have different longitudinal lengths as recited in the claims. Two adjacent cylindrical elements are connected by inter-connecting members (in yellow) in a manner as recited in the claims.

As to claim 35, W-shape valley portions and W-shape peak portions are out of phase because W-shape valley portions and W-shape peak portions have different orientation.

3. Claims 1, 3-4, 6-11, 13-19, 21-23, and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by ALLEN et al (US 2001/0016770A1).

As to claims 1, 3-4, 6-7, and 21-22, ALLEN (see Fig. 8 reproduced and shown in page 2) discloses a balloon assisted expanding stent (see page 2, lines 1-6, section [0016]) or a self-expanding stent (see page 2, lines 7-10, section [0018]) comprising V-shaped and W-shaped peak portions, V-shaped and W-shaped valley portions, wherein W-shaped portions are smaller in length than the V-shaped portions as recited in the claims.

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As to claims 8-10, ALLEN (see Fig. 8 reproduced and shown in page 2) discloses a stent comprising V-shaped and W-shaped peak portions, V-shaped and W-shaped valley portions, wherein W-shaped portions are smaller in length than the V-shaped portions as recited in the claims. Further as to claims 13-16 and 11, Fig. 8, page 3, shows valley portions and a connecting member as recited in the claims.

As to claims 17-19, ALLEN (Fig. 8 reproduced and shown in page 2) discloses each cylindrical element has at least 4 W-shaped valley portions adjacent to at least 4 V-shaped valley portion and W-shaped valley portions are smaller than V-shaped valley portions.

As to claim 23, see ALLEN's Fig. 8, page 2.

As to claims 32-33, see ALLEN's Fig. 8, page 2.

Notice that V-shaped and W-shaped portions can be peaks or valley portions dependent on one's consideration which side of the drawing is up.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over ALLEN et al (US 2001/0016770A1).

As to claim 20, ALLEN (Fig. 8) does not show 8 peak portions and 8 valley portions. However, it would have been obvious to one of ordinary skill in the art to provide 8 peak portions and 8 valley portions to ALLEN stent as claimed to make a stent having larger diameter to fit a larger blood vessel.

***Allowable Subject Matter***

Claim 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed in the previous response (paper #24) have been fully considered but they are not persuasive.

Basically, the Applicant asserts that ALLEN reference and DANG reference identify peak portions, valley portions and interconnecting members differently from the way the Examiner does. In addition, the ALLEN V-shaped and the W-shaped portions may be not capable of nesting because of the existence of reinforcing members 44.

Notice that ALLEN and DANG stent structures are clearly shown in the drawings to clearly specify their inventions. Even ALLEN and DANG references identify and name various elements (cylindrical elements) and components (peak portions, valley portions) of the stents differently, the Examiner's rejection is considered proper and reasonable as long as the elements of ALLEN and DANG stents exist in drawings in the references as pointed out in the "Office Action". Further more, from ALLEN Fig. 8, because the members 44 are arranged longitudinally offset one to each other, under crimping, ALLEN V-shaped and the W-shaped portions are capable of being moved closer one to another to make nesting possible.

As long as the claims read on DANG and ALLEN references, a rejection should be made. Therefore, the above rejection based on ALLEN and DANG references remains effective.

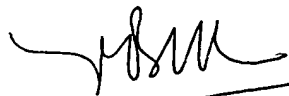
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**Conclusion**

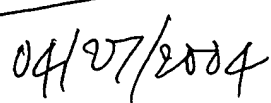
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 703-306-3420. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on 703-308-2496. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Vy Q. Bui  
Primary Examiner  
Art Unit 3731